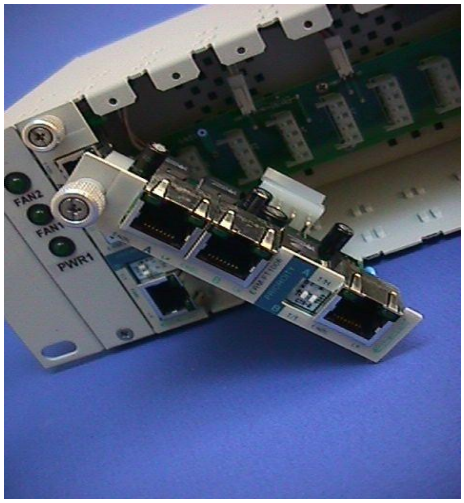
"The Connectivity Connection"

ERMFTT1008 100TX Fault Tolerant Transceiver Card



ERMTT1008 plugs into ERM21C, 21 Slot Chassis

Features:

*** Automatic MDI/MDIX detection**
*** Fast Link Pulse Generation: This feature allows auto negotiation partners to go full duplex.**
*** Ensures connection even if segment is damaged or sabotaged.**
*** User selectable configuration, TCVR to TCVR, or TCVR to HUB.**
*** Compact rugged steel enclosure.**
*** Designed and manufactured in the USA.**

ERMFTT1008 is designed to obtain the highest level of data reliability using redundant data paths. It does so by providing a main port and 2 redundant ports (A & B). The user can select either A or B the primary RJ45 port, by using of the A/B select switch. The ERMFTT-1008 will only pass data on the primary port, or on the active port in the case of a cable failure. The transceiver will automatically return to the primary port when it senses that this port has got a valid link.

Monitoring LEDs

All three RJ45 ports have their own set of two LEDs on for each of the following:

LINK/Activity, Indicates that a proper 100BaseTX link has been established at the port. LEDs for both ports (RJ45 connectors 2 & 3) should be **ON** during when a good link is present and when there is absence of data. The LED should blink when the data is passing through. The Link LEDs should be on if all connections have been made properly, if the cable is intact, and if the device on the other end of the cable is operational.

ENABLE, Indicates that the port is the one in use. Only one of the LEDs should be lit on at any given time in the "Hub" mode. Both enable LEDs should be on in the T-T (transceiver-transceiver) mode**.**

Locating ERMFTT1008 transceivers:

The ERMFTT1008 must be used in conjunction with the ERM21C, 21 slot rack-mount chassis, it simply plugs in and the set screw holds it firmly in place. Run a UTP cable from the work-station or network device to the ERMFTT1008. A second and third UTP cables are then used to connect to another ERMFTT1008 or a hub, or a switch. These cables can be up to 100 meters (328 ft.) in length. It is advisable to follow the Ethernet specifications for aggregate twisted pair lengths. EtherCom models ERM12, EFM12, EFM14, EFM15, or EMB11 twisted pair to fiber media converters may be utilized to extend these segments to 2 kilometers, single-mode versions can extend the segments to 15 or 100 kilometers using fiber optic media.

In the TCVR/TCVR (T-T) mode any port on the ERMFTT1008 can be connected to any port on the other transceiver, because the data is transmitted simultaneously on both A and B ports and will be received on only one port either the primary of the secondary. If both links are present on the receiving end, the data will be received by the primary port. In the event where the primary link is terminated, then the secondary port on the receiving end will be enabled.

The ERMFTT1008 is fully compatible with Ethernet V2.0/IEEE 802.3 transceiver specifications for CSMA/CD 100 Mbps operation.

Switches

The set of four miniature slide switches on the front of the unit are:

- **Switch 1, marked A - B,** Selects either port A or port B as primary port.
- **Switch 2, marked T-T - HUB,** (Fault Tolerant Transceiver - Hub) Lets you set up the operation of the unit for transceiver to transceiver or transceiver to hub.

UTP Crossover Capability

The ERMFTT-1008 has an automatic MDI/MDIX detection feature, this eliminates the need for a specially configured UTP crossover cable. It allows a repeater or a non-repeater device to be attached to the UTP segment side.

FLP (Fast Link Pulses) Generation

The device generates fast link pulses upon the connection of the UTP cable on all 3 ports. This feature allows its link partners to auto-negotiate to the full duplex mode so it can obtain the highest performance.

ERMFTT1008 TECHNICAL SPECIFICATIONS

Network Standards	Ethernet V2.0/ IEEE 802.3	
Speed	100 Mbps.	
Half duplex	Yes	
Full duplex	Yes	
Power Source	ERM21C	
LEDs	Total 6	Enable & Link for each RJ45
Weight	0.2 lb.	91.0 g.
Dimensions	3.36" x 2.14" x .73"	(8.84 cm x 5.25 cm x 2.09 cm)
Environmental	*Operating Temperature*	32 to 122F (0 to 50 C)
	Storage Temperature	-4 to 140F (-20 to 60 C)
	Relative Humidity	5% to 95% (non-condensing)
Switches	2 position DIP switch: One for TCVR to TCVR, or for TCVR to Hub. The other for Priority Segment, A or B	
Connectors	3 Fully Shielded RJ45 connectors.	
Cabling	UTP Category 5e, *maximum cable distance* 100 meters	
EMI & Safety	FCC Class A & CE	
Warranty	5 years	